

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A carrier for co-culturing with a fertilized ovum of an animal comprising a cell incorporated type three-dimensionally reconstructed tissue for co-culturing the fertilized ovum of an animal for the purpose of adhesion and three-dimensional growth of the fertilized ovum, wherein the tissue can substitute a function of endometrial tissue to implant a fertilized ovum and support subsequent growth therefrom.

2. (Currently Amended) The co-culturing carrier according to Claim 1, wherein the cell incorporated type three-dimensionally reconstructed tissue is reconstructed tissue/organ engineered from one or more biological materials selected from the group consisting of cells, tissues, and organs, wherein said one or more biological materials are derived from animals the same animal or a different animal from which the fertilized ovum is obtained.

3. (Previously Presented) The co-culturing carrier according to Claim 1, wherein the cell incorporated type three-dimensionally reconstructed tissue further comprises one or more extracellular matrix components and/or one or more mesh networks.

4. (Previously Presented) The co-culturing carrier according to Claim 1, wherein the cells to be incorporated in the cell incorporated type three-dimensionally reconstructed tissue are cells derived from an animal that is homogeneous or heterogeneous to the fertilized ovum.

5. (Previously Presented) The co-culturing carrier according to Claim 4, wherein the cells to be incorporated in the cell incorporated type three-dimensionally reconstructed tissue are cells derived from an endometrium.

6. (Previously Presented) The co-culturing carrier according to Claim 1, wherein the cell to be incorporated in the cell incorporated type three-dimensionally

reconstructed tissue are pretreated with mitomycin C.

7. (Previously Presented) The co-culturing carrier according to Claim 3, wherein the extracellular matrix component is gelated.

8. (Previously Presented) The co-culturing carrier according to Claim 3, wherein the mesh network is composed of one or more natural or synthetic threads and/or a woven mass thereof.

9. (Previously Presented) The co-culturing carrier according to Claim 3, wherein the mesh network is bioabsorptive.

10. (Previously Presented) The method of culturing a fertilized ovum of an animal, comprising introducing the co-culturing carrier according to Claim 1 into a culture vessel and culturing the fertilized ovum of an animal.

11. (Previously Presented) The co-culturing carrier according to Claim 2, wherein the cell incorporated type three-dimensionally reconstructed tissue further comprises one or more extracellular matrix components and/or one or more mesh networks.

12. (Previously Presented) The co-culturing carrier according to Claim 11, wherein the extracellular matrix component is gelated.

13. (Previously Presented) The co-culturing carrier according to Claim 11, wherein the mesh network is composed of one or more natural or synthetic threads and/or a woven mass thereof.

14. (Previously Presented) The co-culturing carrier according to Claim 11, wherein the mesh network is bioabsorptive.

15. (Previously Presented) The co-culturing carrier according to Claim 11, wherein the one or more extracellular matrix components are type-I collagen.

16. (Previously Presented) The co-culturing carrier according to Claim 11,

wherein the one or more mesh networks comprise gauze or cotton.

17. (Previously Presented) The method of culturing a fertilized ovum of an animal, comprising introducing the co-culturing carrier according to Claim 2 into a culture vessel and culturing the fertilized ovum of an animal.

18. (Previously Presented) The co-culturing carrier according to Claim 2, wherein the cells to be incorporated in the cell incorporated type three-dimensionally reconstructed tissue are cells derived from an animal that is homogeneous or heterogeneous to the fertilized ovum.

19. (Previously Presented) The co-culturing carrier according to Claim 18, wherein the cells to be incorporated in the cell incorporated type three-dimensionally reconstructed tissue are cells derived from an endometrium.

20. (Previously Presented) The co-culturing carrier according to Claim 2, wherein the cells derived from animals is selected from the group consisting of endometrial epithelial cells and stromal cells.

21. (Previously Presented) The co-culturing carrier according to Claim 2, wherein the cells derived from animals is selected from the group consisting of bovine endometrial epithelial cells and bovine stromal cells.

22. (Previously Presented) The co-culturing carrier according to Claim 3, wherein the one or more extracellular matrix components are type-I collagen.

23. (Previously Presented) The co-culturing carrier according to Claim 3, wherein the one or more mesh networks comprise gauze or cotton.

24. (Previously Presented) The method of culturing a fertilized ovum of an animal, comprising introducing the co-culturing carrier according to Claim 3 into a culture vessel and culturing the fertilized ovum of an animal.

25. (Previously Presented) The method of culturing a fertilized ovum of an animal, comprising introducing the co-culturing carrier according to Claim 4 into a culture vessel and culturing the fertilized ovum of an animal.

26. (Previously Presented) The method of culturing a fertilized ovum of an animal, comprising introducing the co-culturing carrier according to Claim 5 into a culture vessel and culturing the fertilized ovum of an animal.

27. (Previously Presented) The method of culturing a fertilized ovum of an animal, comprising introducing the co-culturing carrier according to Claim 6 into a culture vessel and culturing the fertilized ovum of an animal.

28. (Previously Presented) The method of culturing a fertilized ovum of an animal, comprising introducing the co-culturing carrier according to Claim 7 into a culture vessel and culturing the fertilized ovum of an animal.

29. (Previously Presented) The co-culturing carrier according to Claim 8, wherein the mesh network is bioabsorptive.

30. (Previously Presented) The method of culturing a fertilized ovum of an animal, comprising introducing the co-culturing carrier according to Claim 8 into a culture vessel and culturing the fertilized ovum of an animal.

31. (Previously Presented) The method of culturing a fertilized ovum of an animal, comprising introducing the co-culturing carrier according to Claim 9 into a culture vessel and culturing the fertilized ovum of an animal.

SUPPORT FOR THE AMENDMENT

Claim 2 has been amended.

The amendment of Claim 2 is supported by page 9, line 22 to page 10, line 16, page 10, line 22 to page 11, line 16, page 14, line 20 to page 24, line 11 and by Claim 2 as originally filed. The specification has been amended to improve the clarity of the text contained therein

No new matter is believed to have been introduced by virtue of the amendment presented herein.